

## EAST Search History

| Ref # | Hits   | Search Query  | DBs  | Default Operator | Plurals | Time Stamp       |
|-------|--------|---|--|------------------|---------|------------------|
| L1    | 198657 | (thick\$5 with (overcoat insulat\$4 planariz\$5))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/16 08:31 |
| L2    | 12163  | (thick\$5 with (overcoat insulat\$4 planariz\$5)) with (absorb\$4 prevent\$4)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/16 08:32 |
| L3    | 5844   | (thick\$5 with (overcoat insulat\$4 planariz\$5)) near10 (absorb\$4 prevent\$4)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/16 08:32 |
| L4    | 733    | ((thick\$5 with (overcoat insulat\$4 planariz\$5)) near10 (absorb\$4 prevent\$4)) and (liquid adj crystal)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/16 08:33 |
| L5    | 496    | ((thick\$5 with (overcoat insulat\$4 planariz\$5)) near10 (absorb\$4 prevent\$4)) and (liquid adj crystal) and @ad<"20040414"   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/16 08:35 |
| L6    | 99     | ((thick\$5 with (overcoat insulat\$4 planariz\$5)) near10 (absorb\$4 prevent\$4)) and (liquid adj crystal) and @ad<"20040414" and ((external adj force) compress\$4 depress\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2007/01/16 08:36 |

## EAST Search History

| Ref # | Hits | Search Query  | DBs           | Default Operator | Plurals | Time Stamp       |
|-------|------|---|---------------|------------------|---------|------------------|
|       |      | 349/43 and (pixel with overlap)   | USPAT         | OR               | OFF     | 2005/04/09 09:44 |
|       |      | 349/38 and ((pixel with overlap) same capacit\$)  | USPAT;<br>JPO | OR               | OFF     | 2002/04/02 15:31 |
|       |      | 349/42 and ((pixel with overlap) same capacit\$)  | USPAT;<br>JPO | OR               | OFF     | 2002/04/02 15:10 |
| S1    | 627  | 349/43  | USPAT         | OR               | OFF     | 2006/03/14 15:15 |
| S2    | 949  | 349/42  | USPAT         | OR               | OFF     | 2005/09/13 09:34 |
| S3    | 198  | 349/44  | USPAT         | OR               | OFF     | 2002/04/01 12:36 |
| S4    | 357  | 349/38  | USPAT         | OR               | OFF     | 2002/04/01 12:36 |
| S5    | 331  | 349/39  | USPAT         | OR               | OFF     | 2002/04/01 12:36 |
| S6    | 608  | 349/110   | USPAT         | OR               | OFF     | 2002/04/01 12:37 |
| S7    | 100  | 349/44 and 349/110  | USPAT         | OR               | OFF     | 2002/04/01 12:47 |
| S8    | 112  | 349/39 and 349/43   | USPAT         | OR               | OFF     | 2005/09/13 09:36 |
| S9    | 79   | 349/43 and ((pixel with overlap) same capacit\$)  | USPAT;<br>JPO | OR               | OFF     | 2005/09/13 09:36 |
| S10   | 348  | (liquid adj crystal)and ((pixel with overlap) same capacit\$)   | USPAT;<br>JPO | OR               | OFF     | 2002/04/01 12:51 |
| S11   | 93   | (liquid adj crystal)and ((pixel with overlap) same capacit\$) and ((pixel with overlap) same data)                                      | USPAT;<br>JPO | OR               | OFF     | 2005/09/13 09:36 |
| S12   | 6    | ("4687298"   "4759610"   "4821092"   "4948231"   "5128726"   "5929948").PN.   | USPAT         | OR               | OFF     | 2002/04/01 14:18 |
| S13   | 11   | ("4759610"   "5432625"   "5517342"   "5680186"   "5724107"   "5744821"   "5745194"   "5781261"   "5822027"   "5936685"   "5966193").PN. | USPAT         | OR               | OFF     | 2002/04/01 18:16 |
| S14   | 9    | 349/39 and 349/43 and buffer  | USPAT;<br>JPO | OR               | OFF     | 2002/04/01 18:47 |
| S15   | 1    | 349/39 and 349/43 and (buffer adj layer)  | USPAT;<br>JPO | OR               | OFF     | 2002/04/01 18:47 |
| S16   | 101  | 349/44 and 349/110  | USPAT;<br>JPO | OR               | OFF     | 2002/04/02 18:04 |
| S17   | 51   | 349/110 and ((pixel with overlap) same capacit\$)   | USPAT;<br>JPO | OR               | OFF     | 2002/04/02 13:22 |
| S18   | 80   | 349/43 and ((pixel with overlap) same capacit\$)  | USPAT         | OR               | OFF     | 2002/04/02 14:49 |
| S19   | 80   | 349/43 and ((pixel with overlap) same capacit\$)  | USPAT;<br>JPO | OR               | OFF     | 2002/04/02 15:08 |
| S20   | 49   | 349/44 and ((pixel with overlap) same capacit\$)  | USPAT;<br>JPO | OR               | OFF     | 2002/04/02 15:23 |

## EAST Search History

|     |       |   |   |    |     |                  |
|-----|-------|---|---|----|-----|------------------|
| S21 | 1     | 349/38 and ((pixel with overlap) same capacit\$)  | JPO   | OR | OFF | 2002/04/02 15:31 |
| S22 | 95    | 349/39 and ((pixel with overlap) same capacit\$)  | USPAT;<br>JPO   | OR | OFF | 2002/04/02 15:33 |
| S23 | 42    | 349/44 and 349/110 and (gate same black)  | USPAT;<br>JPO   | OR | OFF | 2002/04/02 18:05 |
| S24 | 503   | 438/30  | USPAT   | OR | OFF | 2002/04/02 19:33 |
| S25 | 27    | 438/30 and (black same gate)  | USPAT   | OR | OFF | 2002/04/02 19:34 |
| S26 | 13234 | (liquid adj crystal)and ((switch\$4 or TFT or semiconduct\$4) same (capacit\$ or storage))  | USPAT;<br>JPO   | OR | OFF | 2002/10/28 16:40 |
| S27 | 502   | (liquid adj crystal)and ((switch\$4 or TFT or semiconduct\$4) same (capacit\$ or storage)) and (pixel with overlap)                   | USPAT;<br>JPO   | OR | OFF | 2002/10/28 16:44 |
| S28 | 137   | (liquid adj crystal)and ((switch\$4 or TFT or semiconduct\$4) same (capacit\$ or storage)) and (pixel with overlap)and 349/38         | USPAT;<br>JPO   | OR | OFF | 2002/10/29 09:23 |
| S29 | 380   | (liquid adj crystal)and ((switch\$4 or TFT or semiconduct\$4) same (capacit\$ or storage)) and (pixel with overlap)and separat\$4     | USPAT;<br>JPO   | OR | OFF | 2002/10/28 17:39 |
| S30 | 0     | (liquid adj crystal)and (((switch\$4 or TFT or semiconduct\$4) same (capacit\$ or storage)) near separat\$4) and (pixel with overlap) | USPAT;<br>JPO   | OR | OFF | 2002/10/28 17:42 |
| S31 | 6     | ("4687298"   "4759610"   "4821092"   "4948231"   "5128726"   "5929948").<br>PN.   | USPAT   | OR | OFF | 2002/10/28 17:43 |
| S32 | 142   | (liquid adj crystal)and ((pixel with overlap) same capacit\$) and ((pixel with overlap) same data)                                    | USPAT;<br>JPO   | OR | ON  | 2004/10/01 11:16 |
| S33 | 157   | (liquid adj crystal)and ((switch\$4 or TFT or semiconduct\$4) same (capacit\$ or storage)) and (pixel with overlap)and 349/38         | USPAT;<br>JPO   | OR | ON  | 2002/10/29 09:25 |
| S34 | 2269  | 349/139   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2004/10/01 11:15 |
| S35 | 1480  | 349/143   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2004/10/01 11:15 |

## EAST Search History

|     |       |   |   |    |     |                  |
|-----|-------|---|---|----|-----|------------------|
| S36 | 840   | 349/123   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | OFF | 2004/10/01 11:15 |
| S37 | 868   | 349/38  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | OFF | 2004/10/01 11:15 |
| S38 | 615   | 349/39  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | OFF | 2004/10/01 11:15 |
| S39 | 42322 | (liquid adj crystal)and ((pixel with overlap) same capacit\$) and ((pixel with overlap) same data) ans permittivity | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2004/10/01 11:22 |
| S40 | 15    | (liquid adj crystal)and ((pixel with overlap) same capacit\$) and ((pixel with overlap) same data) and permittivity | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2005/09/13 09:37 |
| S41 | 45    | (BCB benzocyclobutene) with permittivity  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB           | OR | ON  | 2004/10/01 11:56 |
| S43 | 410   | 349/43 and (pixel with overlap)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/04/09 09:44 |
| S44 | 206   | 349/43 and ((pixel with overlap) near10 (gate scan\$4))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/04/09 09:49 |
| S45 | 66    | S44 and (light adj leakage)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/04/09 09:47 |

## EAST Search History

|     |      |   |   |    |     |                  |
|-----|------|---|---|----|-----|------------------|
| S46 | 1055 | (liquid adj crystal) and ((pixel with overlap) near10 (gate scan\$4))                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/04/09 09:50 |
| S47 | 212  | (liquid adj crystal) and ((pixel with overlap) near10 (gate scan\$4)) and (light adj leakage)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/04/09 10:25 |
| S49 | 45   | (liquid adj crystal) and ((pixel with overlap) near10 (gate scan\$4)) and (light adj leakage) and m | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/09/13 09:38 |
| S50 | 1778 | 349/43  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/09/13 09:34 |
| S51 | 1526 | 349/42  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/09/13 09:35 |
| S52 | 515  | 349/44  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/09/13 09:35 |
| S53 | 758  | 349/38  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/09/13 09:35 |
| S54 | 702  | 349/39  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/09/13 09:35 |

## EAST Search History

|     |      |   |   |    |    |                  |
|-----|------|---|---|----|----|------------------|
| S55 | 1181 | 349/110   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 09:35 |
| S56 | 232  | 349/44 and 349/110  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 09:35 |
| S57 | 307  | 349/39 and 349/43   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 09:36 |
| S58 | 330  | 349/43 and ((pixel with overlap) same capacit\$)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 09:36 |
| S59 | 816  | (liquid adj crystal)and ((pixel with overlap) same capacit\$) and ((pixel with overlap) same data)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 10:20 |
| S60 | 22   | (liquid adj crystal)and ((pixel with overlap) same capacit\$) and ((pixel with overlap) same data) and permittivity | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 09:37 |
| S61 | 88   | (liquid adj crystal) and ((pixel with overlap) near10 (gate scan\$4)) and (light adj leakage) and m                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 09:40 |
| S62 | 51   | (liquid adj crystal) and ((pixel with overlap) near10 (gate scan\$4)) and (light adj leakage) and m and rub\$5      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/09/13 09:58 |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S63 | 32  | (liquid adj crystal) and ((pixel with overlap) near10 (gate scan\$4)) and (light adj leakage) and m and (rub\$5 with direction) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/09/13 09:59 |
| S64 | 67  | (substrate near10 rub\$4)and ((pixel with overlap) same capacit\$) and ((pixel with overlap) same data)                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/01/16 08:30 |
| S65 | 1   | "20030122988".pn.   | US-PGPUB  | OR | OFF | 2006/01/27 11:19 |
| S66 | 362 | 349/38 and (storage with gate)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/13 17:49 |
| S67 | 564 | 349/43 and (storage with gate)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/27 11:28 |
| S68 | 295 | 349/43 and (storage with gate) and (pixel with overlap)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/27 11:29 |
| S69 | 208 | 349/38 and (storage with gate) and (pixel with overlap)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/27 11:33 |
| S70 | 144 | 349/38 and (storage with gate) and (pixel with overlap with gate)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/27 11:30 |
| S71 | 84  | 349/44 and (storage with gate) and (pixel with overlap with gate)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/27 11:32 |

## EAST Search History

|     |     |   |   |    |     |                  |
|-----|-----|---|---|----|-----|------------------|
| S72 | 207 | 349/43 and (storage with gate) and (pixel with overlap with gate)                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/27 11:31 |
| S73 | 84  | 349/38 and (storage with (gate adj line)) and (pixel with overlap with (gate adj line)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/09/06 14:35 |
| S74 | 134 | 349/43 and (storage with (gate adj line)) and (pixel with overlap with (gate adj line)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/01/27 11:34 |
| S75 | 388 | (349/38-39).ccls. and (storage with gate)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/13 17:51 |
| S76 | 364 | (349/38-39).ccls. and (storage near10 gate)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/13 17:58 |
| S77 | 179 | (349/38-39).ccls. and (storage near10 gate) and (pixel near10 overlap)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 09:48 |
| S78 | 564 | (349/38-39).ccls. and ((storage capacit\$4) near10 gate)                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 09:50 |
| S79 | 376 | (349/38-39).ccls. and ((storage capacit\$4) near10 gate) and (pixel same storage)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 09:51 |
| S80 | 1   | "6307602".pn.   | USPAT   | OR | OFF | 2006/03/14 15:16 |



## EAST Search History

|     |    |   |  |    |    |                  |
|-----|----|---|--|----|----|------------------|
| S81 | 23 | 349/38 and (storage with (gate adj line)) and (pixel with overlap with (gate adj line)) and m       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB          | OR | ON | 2006/09/06 14:35 |
| S82 | 23 | 349/38 and (storage with (gate adj line)) and (pixel with overlap with (gate adj line)) and m       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/09/06 14:37 |
| S83 | 43 | 349/38 and (storage with (gate adj line)) and (pixel with overlap with (gate adj line)) and rang\$4 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/15 11:01 |
| S84 | 47 | 349/38 and (storage with (gate adj line)) and (pixel with overlap with (gate adj line)) and rang\$4 | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/15 11:02 |